G.R.S. IX—5]

Previous references. 1922. (I&C) **File No.** 9.7 of 22

Serial Nos. 1–4

Later references.

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 4

Part B for April 1923

SUBJECT

Improvement of brass industry at Nagamangala and the carving of sandal-wood at Sagar.

S(4)

To

The Offg. Director of I&C
I.C. 6535 of 28/4/23
Records the correspondence in regard to it.

RSB

Printed on the Multigraph.

18436

TELEGRAPHIC ADDRESS "INDUSTRIES"

In reply please refer to
No. A. C. 637 of 22-23

D1498

Encl. No. Two Notes.

Office of the
Director of Industries and Commerce, in Mysore.

Bangalore 16th September *192*2.

Genl C 97-22-1

From

P. G. D'SOUZA, Esq., B.A., B.L.,
Director of Industries and Commerce in Mysore
Bangalore (India)

23 SEP 1922

To

The Secretary to the Government of Mysore,
General Department,
Bangalore.

Sir,

I have the honour to forward herewith for the information of Government copies of 2 Notes prepared at my instance by Mr. H. G. Alderton, Superintendent, Chamarajendra Technical Institute, Mysore, for the improvement of the Brass Industry at Nagamangala and the Sandalwood Carving at Sagar. It is my intention to carry out the improvements suggested on an experimental scale in the Chamarajendra Technical Institute and the Art Workshops and if the results prove satisfactory, arrangements will be made for works being carried on, on commercial lines.

I have the honour to be,
Sir,
Your most obedient servant,

DIRECTOR.

Sub'd for perusal
8/29/9

2) The notes are for perusal. The Director does not state definitely what the outlay on the schemes will be and what return may be expected. - if not in the first year, at least later on. It is not possible to pass any (PTO)

BV)

2

G. R. S. III-2]

General and Revenue Secretariat.

Ic File No. 97. of 1922-23.

Serial No.

orders without a definite scheme.

3) The notes afford interesting reading and there is no doubt improvement of the two important industries on the lines suggested is urgently called for.

Mo
7.10.22

4) (Chf Secy).

On page 4 of his note on the Brass Industry, Mr. Alderton claims that method C is his own invention. This is more fully described on page 6.

5) Page 8 gives the financial data. About Rs 4000 on the whole will be required for the experimental factory & after two years it may be self supporting. Further report of the Director may be awaited.

On page 3 of his note on Sandalwood Carving, Mr Alderton makes some remarks on Sandalwood. He says

NOTE—Contn. sheet.

1498

G. R. S. III-2]

General and Revenue
Secretariat.

I&C File No. 97 of 1922

Serial No.

1. Only manufactured goods & oil should be sold in the foreign markets

2986-S.
2.10.22

First Member
by
Seen

To 1-10.22
2/10

Recd
6-10.22

7) To 7/10/22

8) 8/10

9) Submitted for orders as ~~to what~~ whether any further ~~further~~ action has to be taken, or whether the Officiating Director's further report referred to above should be awaited.

VB
14-10-22

10) Yes
14/10

Sus B. till 1.11.22
do 15.12.22
do 15.1.23
do 31.1.23
do 5.3.23

REV. SECR
14 OCT 19..
...STRIES & CO
BRANCH

11) Submitted with a draft reminder

9-3-23

12) Issue
VB
9.3.23.

NOTE—Contn. sheet.

4

NPK
4510

G. R. S. III-21

General and Revenue Secretariat.

Ic File No. 97 of 1922-23

Serial No.	
2	Ic 5598 d/12-2-23 To Offg. Director I&C Enquire, what action has been taken so far in this direction and with what result.
3	Insd. From the Dr. I&C 2679 of 29-3-23. States that 2 men were trained in wax casting and that they have gone back to Nagamangala, and that in regard to metal moulds the experiment was not satisfactory. (3) It will be seen that further expts. in metal moulds are to be made after Mr. Alcutans return and that the question of opening a factory will be taken up after introducing some local improvements. Submd. for perusal & orders SKy 31-3-23 May be recorded after perusal M.V. 31/3/23 (Sd) B.L. Secy. (B Munshi) M.V. 7/4 R.T.O.

GEN. & REV. SECRE.
12 MAR 1923
INDUSTRIES & COMMERCE

5/2

NOTE—Contn. sheet.

3

1408

G. R. S. III-2]

General and Revenue Secretariat.

I&C File No. 97 of 1922

Serial No.

1 Only manufactured goods & oil should be sold in the foreign markets

2986-S.
2.10.22

First Member by Secy.

To 1-10:22

MS 2/10

Recd 6.10.22

7) To 7/10/22

8) MS 8/10

9) Submitted for orders as to ~~what~~ whether any further ~~further~~ action has to be taken, or whether the Officiating Director's further report referred to above should be awaited

8Ry VB
14-10-22

10) Yes
MS
14/10

Sus B, till 1.11.22
do 15.12.22
do 15.1.23
do 31.1.23
do 5.3.23

REV. SECR 14 OCT 192 INDUSTRIES & CO BRANCH

11) Submitted with a draft reminder.

8Ry
9-3-23

12) Issue
VB
9.3.23

NOTE—Contn. sheet.

5

4510

G. R. S. III-21

General and Revenue Secretariat.

9 H File No. 97 of 1922

	Serial No.	
8541-567 18.4.23		15) Seen..
		Recd. 16) Approved 20.4.23 — 20/4
		17) Submd. with a draft. 24.4.23 18) Issue 24/4
	21	6535 d 25.4.23 To The Offg. Director I and C. Records the correspondence ending with letter no 267 G d 29.3.23 referred to in R 3 B

APR 1923
INDUSTRIES

NOTE—Contn. sheet.

Encls. to Secy

DEVELOPMENT OF ~~BRASS~~ THE BRASS INDUSTRY IN MYSORE WITH SPECIAL RELATION TO NAGAMANGALA.

Present state

From evidence in Nagamangala the brass work industry is very rapidly depreciating both in quality and quantity. There are now only 14 men engaged there in this trade and although there are a few pieces of work ~~w~~ showing exceptional skill the majority of the work is very poor both in design and execution. The market seems entirely local and rapidly failing - and it is said no effort is made to effect sales through the Art and Craft Sale Depot.

In consideration of the cheap possibilities of living in Nagamangala it is peculiar to find that both the raw material and labour are higher in price, though the products are not better or cheaper in quality than in this city of Mysore where the price of living is very higher.

This industry in Nagamangala has depreciated to such a~~n~~ considerable extent that the prospects of immediately restoring it to even its original prestige or to develop it as a flourshing commercial centre are very poor. The workers are very few and mostly unskilful, ignorant of modern methods and possibly conservative regarding their old methods. Still efforts must be immediately made to rescue the industry from complete oblivion.

To develop the industry with any rapidity it seems advisable to open a pioneer factory for Art Metal Work of all descriptions.

present methods.

The present method of production is known as the " Cire perdu" process and is of very ancient origin

origin but it cannot possibly compete with modern production and continue to exist. The process may be divided for convenience ~~with~~ into 4 stages.

analysis of method + costs.

METHOD.	% Proportion of time or labour and value.
(1) Modelling the pattern in wax.	60%
(2) Making a clay mould over the wax and melting out the wax	7% including 2 days wait for drying.
(3) Melting and pouring brass into the moulds	3% Only one model is cast with each firing.
(4) Finishing by filing, chiselling, engraving chasing and polishing.	3%

defects & cause of depreciation.

(5) The high cost of the finished article is caused by the excessive labour involved and the highest skill which is demanded in the preparation of the wax model, and further because "Only one brass cast is obtained from each wax model. No duplicates are possible and thus the whole labour is incurred again for each finished product".

(6) The waste of labour caused in the rectification of the unskillful castings - i.e. filing, patching, hole filling and additions where the metal has not properly run.

(7) The loss incurred by the solid casting is possibly not so costly as the objection to the excessive weight, which in a figure or work of any size is quite prohibitive for the foreign markets

8

In appraising the proportion of costs of the labour and material the labour is 3 to 20 or twice if wax considered times the cost of the raw materials.

Means of rectification: by lowering costs of production

For the successful development of this Industry the principal item for rectification is the reduction of the present cost of the finished goods ~~in~~ consequent upon a similar reduction in the necessary labour. It must be understood that this is vital to the development of the industry and its possible completion in any thing but a local market

It is obvious the reduction of the labour(by far the most~~ly~~ costly item) by 50% or more should cause a reduction of the price of the products by a similar amount but trouble is anticipated here ~~for~~ from the worker who will doubtless strenuously object to such reduction, and be extremely suspicious of any help extended to him with this possibility in view. Yet as this factor is so absolutely essential it may be necessary for Government to establish a demonstration workshop upon these proposed lines.

N.B. Such reduction in the value will not of course exclude a most reasonable advance in the wealth of the brass worker who by reason of the greatly increased production possible will earn a much higher pay.

This ~~proposed~~ reduction is possible by eradication of the present faults upon the following lines:-

Outline of proposed rectification

1. Duplication of the wax moulds by wax casting.
2. Technical skill in casting with a good surface would eliminate much of the finishing process.
3. Hollow casts for reduction of costs of materials
4. Entire ~~of~~ elimination of wax moulding and finishing process for common simple shaped articles and utensils and fixings:

5. Multiple castings and mass production.

This proposed reduction of costs of production is ~~by the introduction~~ possible by the introduction of the following modern methods and ~~in~~ even a possible reduction of labour in some cases to 80% is anticipated

New Methods to introduce -

Modern methods proposed to be adopted (stated here is outline and referred to later in more detail)

A. The Jaipur Method of hollow casting by casting in separate parts which are assembled and riveted or soldered together afterwards. A pattern is used for the easy duplication of parts - no wax modelling is necessary at all..

B. Permanent Metal Moulds - This process should eliminate all the objections in the present methods and is the means by which many countries and particularly Japan are flooding the markets of the world with artistic metalwork.

C. An original Method of my own invention for duplicating the wax moulds adapted to the present Mysorean necessities in production.

D. Electro plating and electro typing - the former for improving the value of baser metals by plating with precious metal, the latter for duplicating very fine and intricate work.

With a small outlay upon labour saving devices which could be made by ourselves a further reduction in the finishing processes could be effected.

Each of these methods have special virtues and limitations and each could with immense advantage be used upon the type of product for which they are expecial especially adaptable and to the very considerable development of our Mysorean brass products and sales

Further detail regarding new methods.

The above processes further detailed but omitting unnecessary technical details and explanations.

Method A.- The benefits are ease and rapidity of multiple production by multiple castings coupled with light hollow castings and economy of materials with elimination of the excessive labour entailed in the preparation of the wax ~~mould~~ model for each casting. This process enables the Jaipur workers to produce and sell goods in large quantities, at least 50% below Mysorean rates.

A piece pattern, which can be used unlimited number of times, is prepared by an expert carver. This is moulded by the sand moulding methods(using a little jaggery and fine casting sand) in the same manner as common iron castings are made - a number of duplicate moulds being prepared and connected by runners and cast together.

Such casting is sometimes done in Mysore for Metal patterns but Jaipur uses soapstone patterns which has many technical advantages.

Soap stone was previously associated with this metal industry in Mysore as is evidenced by the specimens in the Bangalore Museum but the method seems now forgotten.

This process has limitations regarding intricate work but a great deal could be done by careful thought in the design and preparation of the patterns.

It is advisable that patterns should be carved and prepared by an expert carver from the brass workers as the latter possibly has not the necessary technical skill for such preparation.

An important principle to remember is that the

U

the patterns must be so designed and carved that it will readily "draw" out of the moulding sand.

Method B. - This method would give permanent moulds and supersede any modelling or moulding process. The metal mould should give a perfectly finished cast surface also and thus eliminate nearly all the present laborious filing and finishing process. In addition to the extreme rapidity of production this should render unnecessary the two principle features and causing the expense of our Mysorean product at least 80% of the present labour of production is saved. The metal used for the moulds must obviously have a higher melting point than the brass and for this purpose iron has great possibilities or failing this copper although this is more expensive.

From the evidence of the world's market it is obvious that such a process is used very ~~extremely xxxx~~ extensively - but I regret that my experiments with this have not yet been perfected owing to the difficulty of obtaining perfect iron casts with the very inferior founders available in this district.

The design of models for this process require careful consideration and adaptation to evade the limitations of intricate modelling.

Method C. - A method somewhat upon the lines of those at present used by the brass workers, but eleminating the present faults would possibly obtain the greatest favour with the workers themselves from its familiarity, and met with the greater intelligence and success. This process is upon those lines but a great labour economiser

The process is original and aims to duplicate the workers original wax model by reproduction in wax casting. The moulds would probably last for at least 50 repetitions and can be indurated to extend for a

12

for a much longer ~~time~~ service. & for much use a soft metal mould could be used & would be permanent.

The peculiarities of the materials used permit of hollow models of any desired thickness being prepared at the same time retaining all the artistic effects of the original

Method D.

~~Electrotypes of work.~~

This process permits of the duplication of extreme delicacy and minutenes of detail without labour.

Should casts be prepared in an inferior metal this process will be necessary to plate the body with a superior metal and thus greatly enhance its value and saleability.

The process is not expensive but extremely useful

Japanese metal work is frequently finished with coloured lac finish and also by colouring and fuming the metals with a very artistic result. This has not hitherto done in Mysore but there seems no reason for this neglect.

Sheet metal work to develop..

Sheet metal work including repousse work, engraving and chasing should be also developed. The work of one man showing evidence of considerable ability was found in Nagamangala. The outfit for this work is very inexpensive. Prepared sheet goods could possibly be supplied at cheaper rates from the Bangalore Metal Factory.

Necessary measures towards development.

Good tools for supply to the brass workers should be stocked by the Co-Operative societies for these workers, and also the work could be collected by these Societies and forwarded to a Central Depot.

It seems advisable that patterns for casting should be prepared and supplied to the workers at a small rate to cover the costs.

Metal moulds must later be produced and sold as soon as the process is satisfactory.

The worker showing the highest skill could be brought in from Nagamangala and trained at Government expense in the new process with the understanding that he shall demonstrate the whole process in Nagamangala free to any workers willing to learn, for 2 years.

In addition 500/- wd be necessary for materials. & 2000/ at least for a trading stock. The Jaipur School has a stock of 80.000/- value

The establishment of a small factory would possibly cost Rs.1500/- to outfit the present equipment should be as far as possible used. : After the first year or 2 years it should be entirely self-supporting.

New productions to suit the foreign markets

The present type of productions have been hither to almost exclusively for local sale only. With the intended developments it will be necessary to cater for foreign sales also and the following goods are proposed to be manufactured in addition to the present work. Casts could also be made in white metal and silver and plated goods, large goods in iron and small stead casts to be plated.

List of proposed productions.

Brass animals etc as per Jaipur models.

Paper weights. and ornaments. Book ends

Cigar tidies;

Building and furniture fixtures

Door and window fixings.

Drawer and Door handles; excutcheons; lock plates

Powder boxes.

Electric fittings; of all ~~trunks boxes~~ descriptions

Mirror and brush backs and handles

~~Excutcheons, lock plates~~

Toilet table fittings

Standard lamps, table wall and hangings

Hand lamps and torches

Gongs and gong stands.

Trays for all purposes. Ornamental and plain vases
Clock cases and stands. Table centres. Caskets.
Challange cups and shields; Statuettes.
Portrait busts; Memorial tablets and small fountains.
Culinery and ~~s~~table utensils.
Figure casting adapted to the necessities of the foreign market.
Calendars. ~~Cal-inderrs;~~ Frames of all kinds.
Table flower pots.
Biscuit jars.
Tea caddies.
Spice and pot pourri jars
Motor mascots.

This manufacture must of course be run in connection with a sale agency - a catalogue and adequate advertising & a good draughtsman & carver.

Tools & labour saving devices & equipment.

The following additional materials and labour saving devices would be advisable.

1. Tumbling barrels for polishing each Rs.30/
2. Buff~~ro~~s, felt and leather wheels and cones wire brushes about Rs.1/- each.
3. Steel and agate burnishers about Rs.1/- each
4. Drills and plates in present equipment.
5. Needle files, fret saws and hack saws Rs.30/-
6. Repousse metal work outfit. Rs.20/-
7. Letter and number punches Rs.20/-
   doming blocks & swages
8. Figure and pattern punches. Rs.20/-
9. Knurling and milling tools. Rs.1/- each.
10. Castings flasks and boxes. Rs.30/-
11. Acid and acid tanks and bottles and saw dust box Rs.30/-
12. Lacquer ovens.
13. Plaster gelatine - ton 250/- and 1 lb. respectively
14. Electric plating and typing outfit possibly Rs.300/-

and in addition wax, brass sheet and scrap;
casting sand, pig iron.
Advertisement charges.
Catalogue charges.
Benches and tools
Store rooms.
Store clerk
Foreman

Patterns for adaptation or reproduction

Mddels:-

A set of Jaipur small brass figures. Rs.50/-
A set of Mysorean representative brass work Rs.50/-
Models of foreign brass work in demand. Rs.100/-

The services of 2 good carvers for 3 years to prepare patterns. and one good draughtsman with strong designing and inventive ability, with knowledge of the casting limitations and necessities.

Aim in designing.

The objects prepared should be for useful purposes and suitable for the foreign market but designed with Mysorean characteristic features of design in the ornamentation.

This latter feature of national distinctive Art is very important and should be fostered by every means possible. The novelty to the European and particularly American market is a strong sale factor.

The Archaelogical department could greatly assist here by supplying large clear photographs of details of ancient Mysorean and South Indian Art which are mostly to be observed in carvings in stone and wood, metalwork ivory carving and at times in painting. A collection of these should be made and filed for reference in the preparation of designs.

18. 8. 22

MS.17-8-22.

NOTE ON THE IMPROVEMENT OF SANDALWOOD CARVING.

Sandalwood carving is the hereditary accomplishment of a certain class of people known as Gudigars who are endowed with exceptional artistic skill and who are now settled in the district around Sagara. There are now about 60 families and their former nomadic tendencies possibly had considerable influence upon the possible sale of such costly and highly aesthetic products and thus indirectly upon the production of which seems to be an art of very ancient origin.

GUDIGARS.

The Gudigars as a class seem dissolute, very irregular in work and the cost of living is not only very high but their locality is unhealthy. Instances where units have been removed from the home influences show much more favourable results but the dispersion of the people cannot be seriously advocated. Although the prior instigation of the work, both its subject, intention and ultimate uses seem to be religion, yet the producers seem very lacking in this moral backbone and possibly a religion propaganda would do much to rectify the present dissolute and inconstant habits of the people.

COOPERATIVE SOCIETY.

The organisation of a Cooperative Society during the last 5 years has not so far done much to rectify the condition stated above and the work shown by the society is not of the highest conception. But insufficient precise information could be obtained regarding the assessment of prices, organisation of the workshop and sale of materials to criticise the working of the society.

PRESENT STATE OF PRODUCTS.

The products themselves are of a very valuable nature and the work is so entirely a hand production requiring exceptionally high artistic training and of of such a nature that labour saving devices are almost are impossible to devise design ~~and~~ In the last 5 years the prices have raisen so enormously that work in silver could be obtained at approximately the same value and this has of course deleteriously affected the possible sales and the development. The products have also unfortunately deteriorated in quality.

ANALYSIS OF PRESENT CONDITION.

For any adequate rectification or development of the present condition the following facts must be carefully considered.

1. The present products seem almost exclusively designed to meet the local market aware of a religious nature, ~~and~~ the carving although showing the utmost skill and design is not adopted for a foreign market except as a curio~~sity~~.

2. Designing of goods to meet the utilities of foreign markets seems scarcely, if at all, to have been considered.

3. If the present locality is suitable for production the situation is almost impossible for anything but a small local sale.

4. As with most artistic crafts the material, although very valuable intrinsically, is almost insignificant in proportion to the labour value which is 6-10 times the cost of material.

5. The labour of production is such that mechanical means of actual production are impossible and the uses of any class of mechanical appliances devices to expedite the work would be small even with standardised ~~gradu~~ productions.

6. Labour being by far the most costly item pf production economy in this is of the first consideration.

7. The products are of a class in which the high of artistic skill both in design and execution are of

of vital necessity. In fact the artistic conception is of the utmost importance. Any attempt to cheapen the goods by lowering the quality of design or execution would eventually cause ruin to the industry.

Sales depend upon the appeal made by the goods to the acquisitive or possessive faculty developed in the possible buyers. If the goods make a sufficiently strong appeal to the taste by some exclusive power of delicate finish or connection with historic episode etc or otherwise, if the "want to possess ~~produce~~" can be sufficiently excited the price of the goods is no obstacle to sales.

8. The material itself owes its value to its homogeneous grain, eminent suitability for (delicate) carving and also to its (powerful) perfume. It has now beauty of colour and the necessity to retain the emanations of perfume preclude any use of paint or polish of a material nature.

This lack of beauty of colour or grain is possibly the reason of the prevailing habit of carving every a iota of exposed surface and has been carried to such an excessive extent that no plain surfaces are left to relieve or give the necessary effect by comp~~res~~arision to the finely carved forms.

9. A depression of the working of sandalwood was recently caused by the stringent restrictions on the sale and use of sandalwood in the State and caused an unfortunate rise of prices.

A strict embargo should certainly be placed upon sales of raw material, which might possibly pass outside the state for alien manufacture or duplication. This is the MOST important, as such can only mean much loss of possible capital to Mysore and depression of the industry. Only manufactured goods and oil should be sold in the foreign market. The raw material must be jealously and strictly retained as a monopoly of

POSSIBLE LINES OF DEVELOPMENT.

The possible developments are of a nature that could more readily be executed under workshop conditions than by separate units and this is the more ~~infant~~ unfortunate, as the highest work seems to be produced by the individual working alone. Workshop conditions, unless ~~state~~ great care is used, tends to lower the quality in the ~~de~~ endeavour to expedite production and excludes the necessary concentration.

1. To expand the sales by catering for the foreign market by designs adapting the excellence of carving to the necessities prevailing in these foreign market.

2. To expand productions, by increasing the demand by skilful sale agencies and advertisements.

Extreme care must be exercised that the prices do not ~~raise~~ rise above the present limit, and this could be done by

A. standardising values of labour by square measurement, allowing 6 grades of assessment

1. Mouldings.
2. Ornament.
3. Animals, birds and mythological emblems
4. [illegible] Figure in relief.
5. Figure in the round.
6. Carving of the highest excellence.

B. Standardising whole designs with prices for products to sample quality.

3. Raising the standard of the quality of work is of more importance than lowering the values for reasons stated in No. 1 ~~alone.~~ above.

4. Economy of labour by piece production.

Expedition by duplicating standard designs in quantity Work can be ~~centre~~ carried on far more quickly ~~quietly~~ is juxtaposition with a good model or pattern.

ECONOMY OF LABOUR.

For example A. In consideration of the excellence of the material the technical skill shown in the preparation of the uncarved articles ~~materials~~ is of a very low order and greatly depreciates the final product. The actual work of planing, jointings and moulding could be executed by a good carpenter with perfection and much more quickly and cheaply than by the carvers.

Carpenters pay per day Rs.1-4-0
Carvers " " " Rs.3-0-0

B. The employment of the less skilful carvers upon the the less important parts i.e. mouldings and ornaments etc. and the more skilful to be

&. restricted to the more important finish only

C Steel revolving wheel&dies or presses could possibly be used to at least ~~to~~ impress, if not finish the preliminary carving of the mouldings. Careful experiments should be made here.

D. By skilful designing, whereby the value of plain uncarved spaces are used to emphasize the profusion ~~profession~~ and exuberent detail of the adjacent carving.
The ~~material~~ minute carving covering every inch of surface defeats its intention of richness by leaving no plain ~~an~~ contrasting spaces.

5. MATERIAL.

It must not be forgotten that the material itself embodies the following features, advantages and defects.

(a) Value of perfume (by surface exposed only)

(b) Excellence of grain for delicacy of carving.

(c) Intrinsic value of material.

(d) Does not naturally crack and warp IF seasoned properly.

(e) Beauty of colour or grain very limited.

and economy and designs must have strict regard to these - a and b at present seem used to their full value

Regarding c and d economies of material can be wisely effected as follows:-

Sandal should be used whenever possible in ~~their~~ thin slabs. Nothing is gained by the use of heavy masses of this material.

Through cutting in the carving with a contrasting background would not only save material but add to the beauty of the result.

Other woods having excellence either of beauty of grain or colour could be used to enhance the sombre colour of the sandal or the sandal could be inlaid ~~with~~ into other woods in the nature of gems of carving - thus effecting economy of much material and also heightening the effect of the product.

Contrasting woods to try.

Beete or Rosewood.
Blackwood or Ebony
Nagasampiga.
Nandi of deep colour.
Groy muthi.
Jarrah. (Australian Red wood)
Red cedar (deepened in colour.)
Bugany.

Lighter woods are of no value as they offer no contrast

The use of woods to fraudulently imitate sandal is most inadvisable.

MATERIAL.

In effecting economy of material the work of a skilful designer is most necessary

The colour of the sandal could be darkened and beautified by a plain water without stain pigment which would have no effect upon the perfume.

Polish in the usual manner is impossible and a high polish is mot undesirable for carved work, but a dull polish, especially of smooth surfaces would greatly add to the finished appearance of the work and could be given by light friction, as for ~~axxgassi~~ example rubbing ~~highly~~ lightly with soft paper. This appears in no manner to affect the emanation of perfume.

In all countries of Europe and America an inexpensive finish is given to small wood work articles and toys by use of the tumbling barrel with sawdust friction. This simple apparatus could be put to a great many uses but is not found in south India.

Seasoning of the material is a feature which does not seem to obtain any ~~alteration~~ attention at present and its great importance is unrecognised. Seasoning offers the following benefits.

Freedom from cracking, warping and opening joints

Ease of all work, the tools are not impeded by damp gummy cellulose, a clearer and sharper finish to all carved work.

Preservation of the craftsmen's dexterity and crisp cutting.

and most last, but not to least the satisfaction of the patron, all of which are steps towards perfection most easily obtained

6. Design, and products and sales etc.

The goods at present made with suggestion for improvement.

PRESENT PRODUCTS.

Small images of gods in half relief with a shrine of carved small mouldings generally of single figures.

One occasionally finds a specimen of really high class work of this type but not in the Society.

A plain background of contrasting colour could be used very effectively.

Animals represented are generally in relief only and the characteristics of the species and proportion are not correct. The only animal carved in the round seems to be the elephant and it is carved without reference to nature and with an utter absence of the vigour of the wild animal creature so characteristic of Japanese work.

Much could be done by ~~gaing~~ giving good photos or models of Indian animals for reference i.e. elephant, bull peacock, tigers and panthers, crocodile, antilope and buck, buffalo etc.

Caskets and boxes generally well carved and designed but rather heavy and without relief of colour.

The seasoning of the wood is apparently nil and the joints gape open and frequently the screws are driven through the carving! The actual carpentry work could vastly improved by a good carpenter.

Pen racks and inkstands seem rather out of date for modern times and sandal is immediately spoilt by contact with ink.

Book stands - too heavy and much too expensive ~~and~~ model is being submitted to rectify the style.

Frames generally of the Oxford type and badly designed and finished; much could be done with these if the sizes and designs are adapted to suit special purposes and some good modern ideas adopted.

Necklaces - the only feature of these seems to be to utilise waste wood. The thought evidenced by the designs exhibited an utter travesty of art only; there is no interesting feature, no beauty of colour, no contrasting shape or material in fact no thought is expended to make these attractive or desirable. The mascot ~~mixed~~ idea as an appendage would ~~work~~ be valuable; there is infinite scope here for development.

7 DEVELOPMENT.

PRODUCTS.

The goods so far produced possibly meet all the requirements of the local market, but the local market is insignificant in comparision with the possibilities of the foreign~~market~~ trade.
The value of the present products in the foreign market is merely that of a "curio~~sity~~", as a useless ornament and a little thought will make it obvious that large sales on such lines are impossible.

In European Society the demand for perfume and choice artistic goods is almost exclusively made by the women. This fact must not be forgotten in designing goods. Sandalwood is a far more suitable and desireable material for the preparation of the multitude of boudoir and drawing room "necessities" than the silver used at present so lavishly. The virtue of silver is its cheapness in production by electroplating and as it is impossible for sandal to adequately compete in with this feature it is advisable to make the desirability and appeal of sandalwood by its high quality i.e. its high excellence of carving and design. In this quality it should rival ivory and rise superior to it by virtue o of its perfume.

DESIGN.

The carved ivory designs of Delhi and Travancore could with great advantage be studied for ideas and ideas and improvement in sandal carving

The sandal is somewhat akin to Mysorean work in design and ornamental study of the ornamental characters used could be a beneficial aid in development of our national characteristic features in sandal carving.

IMPORTANCE OF PRESERVATION OF NATIONAL CHARACTERISTICS OF DESIGN.

For the foreign market a most important observance is the strict retention and exclusive fostering of our quaint characterised shapes in design. Any attempt to copy European design and thus make open competition with their products would be MOST unwise and lose to one of our strongest sale motives.

In fact so important in this preservation of our national designs. That a good book of such exclusively Mysorean and South Indian units and ornamental features together with any mythological lore connected with the same would be most valuable.

As with ivory and silver, sandal is not adapted for the manufacture of large articles, but is admirably suited for veneering, panelling and "carved inlaying" and these latter use seems omitted. Inlaying could consist either of an carved small plaque of complete design or as a units of design in the same manner as the carved pearl is utilised by the Japanese in their lacquer screens and large productions.

There are infinite possibilities in the development of sandal carving hitherto unexploited, but requiring most careful consideration in design and adaptation to the necessities of modern society.

Another strong and important sale motive is the is the storied design feature. The sandal carving frequently illustrate some episode from Mahabharata and Ramayana or Upanishads. To the Indian these are too well known to require explanation but I have noticed that westerners show great interest in these tales and require

require the translation of the episode written out. If the episode connected with the carvings was typed out in a short and interesting explanation and sold with the carvings it would create strong interest and sale motive in the foreign market.

Harold Alderton
12-9-22

11-9-22
MF.

G. R. S. VI—G/32]

SUBJECT..

Diary No. of letter replied to

Section Ste

File No. 97-22

Serial No. 2

General and Revenue Secretariat

( )

, the 191 .

No. I. C. 5598

Date of issue 12/3/23

Signed by Wm. M. S. R. Rao

To

The Offg. Director &c

Sir,

With refce. to your letter no OC 637 d/ 16.9.22 forwarding copies of 2 notes prepared by Mr. H. G. Alexton on the Improvement of the Brass Industry at Nagamangala & the carving of Sandalwood at Sagar, and stating that ~~you would~~ it was your intention to carry out the Improvements on an Experimental scale etc., I am directed

over.

to Enquire what action has been taken so far in this direction and with what results.

Thane Ali.

9.3.23

For Genl. Secy

Secy

9-3-23

List of enclosures.

Copied by

Examined by

[illegible] 29.

TELEGRAPHIC ADDRESS "INDUSTRIES"

In reply please refer to
No. 2679

I&C 97-22-3

ENCL. No.

OFFICE OF THE
DIRECTOR OF INDUSTRIES AND COMMERCE, IN MYSORE.

Bangalore ~~26th~~ 29 March 1923

FROM

P. G. D'SOUZA, ESQ., B.A., B.L.,
Director of Industries and Commerce in Mysore
Bangalore (India)

35343

29 MAR 1923

GEN. & REV. SEC.
MAR 1923
INDUSTRIES &

To

The Secretary to Government,
General Department,
Bangalore.

SIR,

31/3

Subject:- Improvement of brass industry at Nagamangala and the carving of sandalwood at Sagar.

With reference to your letter No.I.C.5598/I&C 97-22-2 dated the 12th instant on the above subject, I have the honour to state two men have been trained in regard to duplication of wax moulds of wax casting and casting with a good surface making new designs. After the completion of the course of their training, these men have gone back to Nagamangala. Steps are being taken to provide them with suitable work and find a market for the goods that they manufacture through the Arts & Crafts Depot. Arrangements are also ~~being made to~~ manufacture the different classes of articles mentioned by Mr. Alderton. As ---- regards the metal moulds the experiment did not prove satisfactory and has been held over till Mr. Alderton's return. In regard to the opening of a factory as proposed by Mr. Alderton, the matter will be taken up after some more local improvements are ~~in progress~~ introduced.

I have the honour to be,
Sir,
Your most obedient servant,

DIRECTOR.

SDN)

G.R.S. VI G 34]

SUBJECT..

Section I&C

File No. 97-22

Serial No. 4

Diary No. of letter replied to........................

General and Revenue Secretariat

( )

, the 192

Proceedings of the Government of His Highness the Maharaja of Mysore

Date of issue.... 25/4/23

Signed by Mr. M S R Rao

Read—

letter no. O.C. 637 d 16.9.22 from the Offg. Director, I&C forwarding copies of two notes prepared by Mr. H. G. Alderton on the improvement of the brass industry at Nagamangala and the carving of Sandalwood at Sagar, and stating that

Order Thereon No. he would carry out the improvements suggested on an experimental scale in the Cham. Tech. Institute and the Art Workshop, and that [illegible] if the results proved satisfactory arrangements would be made for the works being carried

May this be

- i Printed ?
- ii treated as a standing order ?
- iii published in the Gazette, English Part ?
- iv translated ?
- v placed at the disposal of the press ?
- vi published in the Gazette, Kannada Part ?

on on commercial lines.

2. Correspondence ending with letter no. 267 G. d 29.3.23 from the same officer stating that two ~~men~~ men trained in wax-casting have gone back to Nagamangala, that arrangements are being made to manufacture the different classes of articles mentioned by Mr. Alderton ~~and~~ that further experiments in metal-moulding have been held over till the return of Mr Alderton, and that the opening of an Art-metal factory will be taken up after introducing certain local improvements.

Ordr No 6535 d 25/4/23

List of enclosures.

Recorded.

24/4/23

Rev. Secy

Copied by

Examined by

To The Offg. Director I&C

8 Am,
24.4.23